

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)	
)	
Promoting Interoperability in the 700 MHz)	WT Docket No. 12-69
Commercial Spectrum)	

REPLY COMMENTS OF CTIA – THE WIRELESS ASSOCIATION®

I. INTRODUCTION AND SUMMARY

CTIA – The Wireless Association® (“CTIA”)¹ hereby files these reply comments in response to the Commission’s Notice of Proposed Rulemaking (“*NPRM*”) in the instant proceeding.² As described in CTIA’s initial comments and below, the Commission should facilitate the resolution of interference among Commission licensees. Several parties have proffered suggestions for how the Commission may resolve interference from high-powered television broadcasts on Channel 51 and interference from the Lower 700 MHz E Block. Such action can help ensure the deployment of wireless broadband and innovative services in 700 MHz spectrum.

¹ CTIA – The Wireless Association® is the international organization of the wireless communications industry for both wireless carriers and manufacturers. Membership in the organization includes Commercial Mobile Radio Service (“CMRS”) providers and manufacturers, including cellular, Advanced Wireless Service, 700 MHz, broadband PCS, and ESMR, as well as providers and manufacturers of wireless data services and products.

² *Promoting Interoperability in the 700 MHz Commercial Spectrum*, Notice of Proposed Rulemaking, FCC 12-31, ¶ 5 (2012) (“*NPRM*”).

II. THE RECORD MAKES CLEAR THAT THE COMMISSION SHOULD FACILITATE THE RESOLUTION OF INTERFERENCE ISSUES.

The record before the Commission in this proceeding demonstrates that there are two potential sources of interference: (1) high-powered television broadcasts on Channel 51 and (2) interference from the Lower 700 MHz E Block.

A. High-Power Broadcasts on Channel 51 Threaten the Lower 700 MHz A Block Deployment.

Interference caused by Channel 51 to the Lower 700 MHz A block has been well documented, and this interference threat has had a significant impact on network deployment. Cricket Communications highlighted this interference as “a significant hurdle to deployment on this spectrum,”³ and urged the Commission to take an active role in driving solutions.⁴ Channel 51 is directly adjacent to the downlink band for the A Block with Channel 51 broadcasts operating at a much higher power level than the wireless facilities in the Lower 700 MHz band.

Channel 51 operations pose a significant interference threat to deployment because the rules adopted by the Commission to prevent interference between these bands created “broad exclusion zones within which A Block licensees are prohibited from operating.”⁵ Indeed, “in

³ Comments of Cricket Communications, Inc., WT Docket No. 12-69, at 11 (June 1, 2012) (“Cricket Comments”). *See also* RIM Comments at 14 (“As noted by AT&T in its ex parte letter to the Commission on December 21, 2011, the high power broadcasts in Channel 51 and in the 700 MHz Lower E block are potentially problematic for mobile deployments in adjacent A block. These interference challenges are significant and should be rectified.”).

⁴ *Id.*

⁵ AT&T Comments at 44-45. *See also* Comments of Cavalier Wireless, LLC and Continuum 700 LLC, WT Docket No. 12-69, at 14 (June 1, 2012) (“Cavalier and Continuum Comments”) (“the applicable [“preclusion zone”] rule was developed over a decade ago and was based on the need to provide protection between two high powered transmitters. That makes sense for broadcast facilities. But it makes little sense where, as is here the case, one of the transmitters operates at very low power.”); Comments of the Communications Liberty and Innovation Project, WT Docket No. 12-69, at 8 (June 1, 2012) (“CLIP Comments”) (“The interference protection criteria adopted by the Commission created exclusion zones that inhibit A Block deployment in many markets.”).

some cases A Block licensees contend that it is practically impossible for them to meet their build-out requirements.”⁶ For Frequency Division Duplex (“FDD”) systems, such as those used by wireless carriers, a 60-mile geographic separation requirement apparently would apply. Such requirements essentially preclude provision of two way service by Lower 700 MHz A Block licensees in any fashion in many markets across the country. Several licensees have reported challenges in building facilities in the Lower 700 MHz A Block as a result of Channel 51 incumbents.⁷ For this reason, the presence of high power television broadcasting so spectrally close to wireless networks poses a considerable threat to mobile broadband deployment.⁸ Channel 51 interference is, therefore, “an issue of great importance to A Block license holders and needs to be addressed.”⁹

B. Operations on the Lower 700 MHz E Block Also Threaten the Lower 700 MHz Band.

The proximity of the Lower 700 MHz E Block – in which high power transmissions are currently permitted under Commission rules – to at least the Lower 700 MHz A block also subjects this band to the threat of harmful interference. For this reason, the Commission has asked in the *NPRM* whether it should “modify [its] rules for Lower 700 MHz D and E Block

⁶ AT&T Comments at 45.

⁷ See, e.g., Comments of King Street Wireless, L.P., RM-11626, at 5 (April 27, 2011) (stating that it is attempting to actively build out on its A Block spectrum, but that “Channel 51 issues appear to be present” and that “[p]rompt action on [the CTIA/RCA Petition] is necessary in order to permit King Street to engage actively and effectively with Channel 51 licensees, and to facilitate service to the public over this spectrum”); Comments of Cincinnati Bell Wireless, LLC, RM-11626, at 2 (Apr. 27, 2010) (reporting that its A Block deployment is “directly impacted” by a Channel 51 incumbent, and that “it appears that the technology does not yet exist to resolve the interference problems entirely”).

⁸ See Cavalier and Continuum Comments at 14.

⁹ Comments of United States Cellular Corporation, WT Docket No. 12-69, at 21 (June 1, 2012) (“U.S. Cellular Comments”).

operations, using the technical conditions set forth in the AT&T/Qualcomm decision as a template.”¹⁰

Currently, E Block licensees have not commenced service using this spectrum. However, under the Commission’s rules these licensees have the authority to begin 50 kilowatt broadcasts at any time, and are permitted to deploy multiple transmitters throughout their licensed area.¹¹ CTIA therefore asks the Commission to closely examine the interference potential of E Block operations, and to take actions necessary to mitigate this threat to wireless broadband deployment.

As Cricket Communications stated in its comments, “the Commission must also begin addressing immediately the interference issues that have impeded deployment in the Lower 700 MHz A Block spectrum. Only then can the Commission fully ensure that wireless broadband can be successfully deployed across the entire Lower 700 MHz spectrum.”¹²

III. THE LOWER 700 MHZ INTERFERENCE ENVIRONMENT REQUIRES COMMISSION ACTION.

It is clear from the evidence provided in this proceeding that the interference environment from Channel 51 and high power E block operation would benefit from Commission action. CTIA notes that numerous parties in this proceeding have proffered possible solutions for the Commission to explore, and the Commission should closely review all such proposals.

CTIA has long been an advocate for Commission action to end the interference threat posed by Channel 51. Last year, CTIA and the Rural Cellular Association (“RCA”) took an

¹⁰ *NPRM* at ¶ 43.

¹¹ *AT&T Comments* at 34.

¹² *Cricket Comments* at 10.

important first step in this process with the filing of a Petition requesting that the Commission:

(1) initiate a rulemaking to prohibit future licensing of broadcast television stations on Channel 51, (2) adopt a freeze on licensing activity for Channel 51 applications, and (3) develop accelerated processes for relocation of Channel 51 licensees that have reached a voluntary agreement with an adjacent wireless licensee to relocate to an alternate channel.¹³ CTIA applauds the Commission's action in August 2011 to impose an immediate freeze on the filing of new applications on Channel 51 and the processing of pending applications on this channel, as well as the Commission's stated willingness to accommodate voluntary relocations of full power television stations on Channel 51.¹⁴

Thus far in the instant proceeding, numerous parties have advanced proposals to resolve interference from Channel 51:

- The Commission could relocate Channel 51 incumbent operations to vacant channels in markets where they are available.¹⁵
- The Commission should adopt rules to encourage rapid negotiation of voluntary relocation agreements involving Channel 51 broadcasters.¹⁶

¹³ See Petition for Rulemaking and Request for Licensing Freeze by CTIA – The Wireless Association and Rural Cellular Association, RM-11626, at 1 (March 15, 2011).

¹⁴ *General Freeze on the Filing and Processing of Applications for Channel 51 Effective Immediately and Sixty (60) Day Amendment Window for Pending Channel 51 Low Power Television, TV Translator and Class A Applications*, Public Notice, DA 11-1428 (Aug. 22, 2011).

¹⁵ Comments of CTIA – The Wireless Association®, WT Docket No. 12-69, at 6 (June 1, 2012) (“CTIA Comments”).

¹⁶ Comments of the Rural Telecommunications Group, Inc., WT Docket No. 12-69, at 13-14 (June 1, 2012) (“RTG Comments”) (“Finally, the Commission should reduce the existing regulatory burdens facing those A Block licensees and Channel 51 DTV broadcast licensees who wish to enter into agreements for the migration of DTV services to lower channels.”); CTIA Comments at 6; Verizon Wireless Comments at 3 (“For example, the Commission could adopt rules to encourage rapid negotiation of voluntary relocation agreements by adopting a process for resolving disputes that arise from these negotiations, as the Commission has done in other proceedings.”). See also Cricket Comments at 11 (“Although the Commission should also explore mechanisms, such as incentive auctions or other relocation schemes, to encourage

- For those broadcasters that voluntarily relocate or cease broadcasting, the Commission could take steps to ensure they retain the right to participate in incentive auctions.¹⁷
- The Commission could offer incentives to Channel 51 broadcasters that agree to relocate, such as priority status in further television band repacking or a premium on bids to sell in an incentive auction.¹⁸
- Channel 51 licensees could be given the option to channel share with another channel on a different frequency in advance of the incentive auction.¹⁹
- The Commission could permit a Channel 51 licensee to sell or lease its licenses to another party, including a wireless carrier, which would cease to operate the station under the terms of interim rules, and who could participate in the auction.²⁰
- The Commission should expedite network deployment by using its waiver authority to ease the digital television signal protection criteria in Section 27.60 of the rules.²¹

Channel 51 licensees to transition quickly and voluntarily to other spectrum, the Commission should pursue these mechanisms as a supplement to expedient waiver proceedings.”).

¹⁷ Verizon Wireless Comments at 3 (“The Commission could adopt procedures to enable Channel 51 broadcasters that voluntarily relocate or terminate operations now to retain their rights to participate in the incentive auction and/or to avoid the need to relocate a second time.”); AT&T Comments at 45-46 (“Accordingly, there is a pressing need for the Commission to fashion targeted, interim solutions that will encourage Channel 51 licensees to cease or relocate their broadcasts in the period leading up to the auctions and that will also preserve the broadcasters’ statutory rights to participate in and benefit from the auctions and to exercise must carry rights.”); AT&T Comments at 46 (“The Commission would ensure under each of these options that the licensee could still place its Channel 51 spectrum in the [incentive] auction.”).

¹⁸ Verizon Wireless Comments at 3 (“In addition, the Commission should also consider incentives for Channel 51 broadcasters who agree to relocate, such as ‘first choice’ among channels in the repacking process, and/or, for those that participate in the incentive auction, a premium on their bids to sell.”).

¹⁹ RTG Comments at 13-14 (“Additionally, the Commission’s new policy of promoting channel sharing in the TV Bands will incent Channel 51 broadcasters to cease operating on Channel 51 and move to a lower channel in exchange for future proceeds derived from incentive auctions. Such a financial incentive would expedite the migration process from Channel 51 and the elimination of any interference risk.”); AT&T Comments at 46 (“The Channel 51 licensee could also be given the option to channel share with another channel on a different frequency.”).

²⁰ AT&T Comments at 46, 48.

²¹ Cricket Comments at 11 (“For example, the Commission could use its waiver authority to ease the digital television signal protection criteria in Section 27.60 of its rules, which require mobile transmitters to operate at reduced power in the coverage area of affected broadcast stations, in order to expedite deployment by carriers in the near term.”).

CTIA encourages the Commission to take all of these suggestions under advisement and take prompt action to encourage the relocation or exit of Channel 51 incumbent television broadcast operations. This action by the Commission would play a key role in the resolution of the current interference.

Similarly, numerous commenters urged the Commission to take action regarding the existing interference potential of the Lower 700 MHz E Block. Specifically, several commenters urged the Commission to apply to the Lower 700 MHz E Block the same operating conditions that were imposed on AT&T's use of the D Block (and its E Block licenses) in the *AT&T/Qualcomm Order*.²² CTIA agrees that uniform application of technical requirements across the Lower 700 MHz D and E bands can help address interference and take an important step toward facilitating the Commission's interoperability objectives.

²² Letter from Joan Marsh, AT&T to Marlene H. Dortch, FCC, WT Docket No. 11-18 (Dec. 22, 2011) ("AT&T December 22 Ex Parte") ("To fully address the interference challenges, AT&T believes that the Commission must, at a minimum, modify the rules governing service in Channel 51 and in the 700 MHz Lower E block to permit power levels, out of band emissions and antenna heights that are no greater than those currently permitted in the 700 MHz Lower A and B blocks, to allow downlink only in the Lower E block and uplink only in Channel 51, and to relocate any incumbent high power broadcast operations out of Channel 51 and the Lower E block."); AT&T Comments at 49; Cricket Comments at 11-12 ("With respect to other interference issues, the Commission should consider harmonizing the Lower 700 MHz E Block power limits with those applicable in the other Lower 700 MHz frequencies, as it did as a condition to AT&T's acquisition of Qualcomm's Lower 700 MHz D and E Block licenses."); RIM Comments at 14-15; Comments of T-Mobile USA, Inc., WT Docket No. 12-69, at 18-19 (June 1, 2012); Cavalier and Continuum Comments at 14.

IV. CONCLUSION

The record makes clear that interference from Channel 51 broadcast licensees and Lower 700 MHz E Block is a major concern, and CTIA urges the Commission to take actions to resolve this interference to facilitate and enhance wireless broadband deployment in the Lower 700 MHz band.

Respectfully submitted,

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